

Maritime Domain Awareness

A Waterfront View

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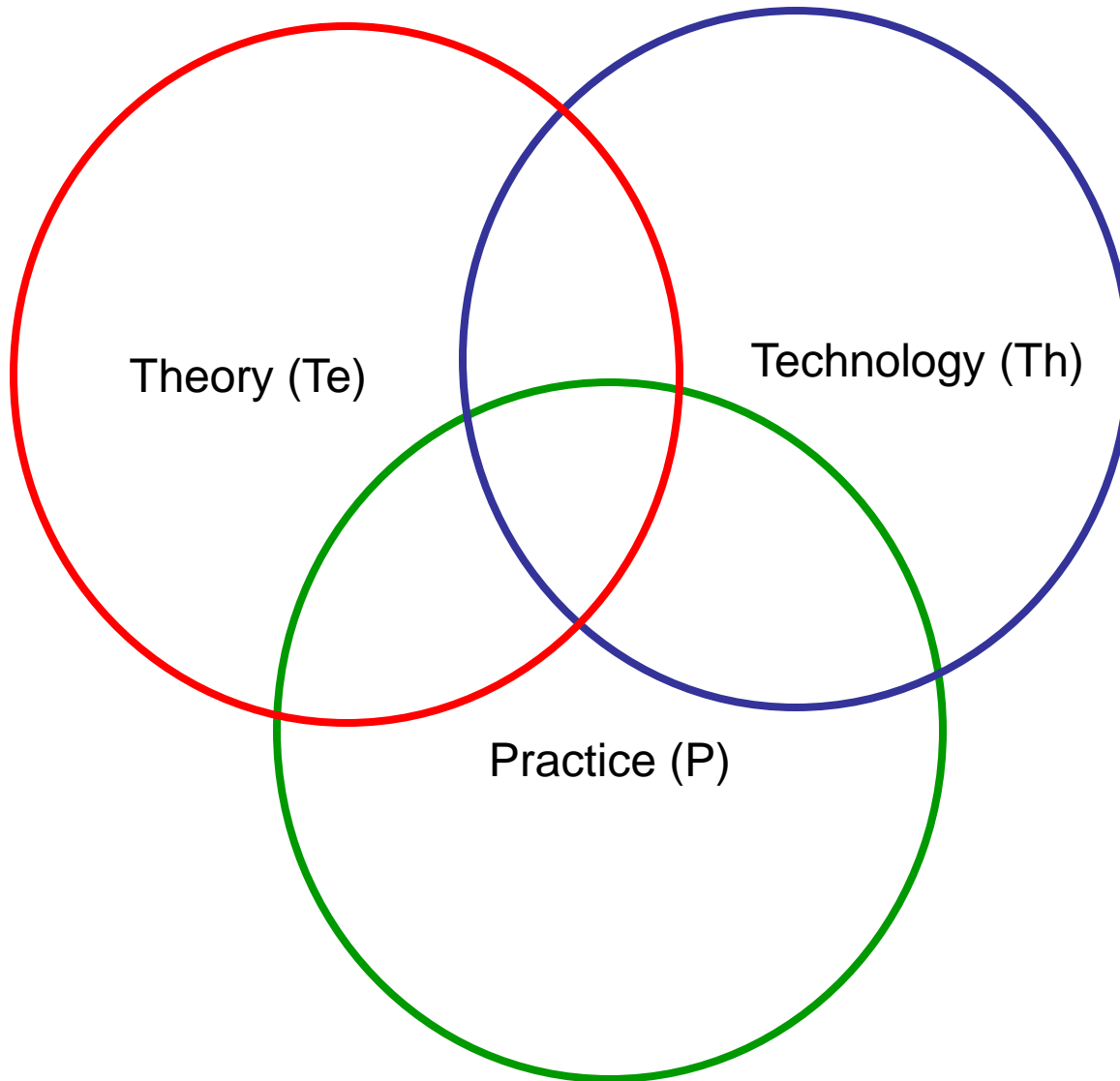
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Key Points

- Defining the problem
- Practical challenges
- A real example
- Your “Desired Outcomes”
 - Questions that need to be asked/answered

The Problem

- Where did this come from?
- How do we describe it?
 - Technological (Te)
 - Theoretical/Cognitive (Th)
 - Practical (P)
- Complicating Factors
 - Geography
 - Mobility
 - Information (Volume & Quality)
 - Perspective
 - Threat/Target
 - Lexicon
 - Etc....





Ongoing MDA Challenges

- Managing Information/Intelligence
 - RMP alone is insufficient
 - Info sharing between partners
 - Different and multiple AORs in a single region
 - Surveillance info mandated by regulatory regimes as opposed to a security mandate
 - Require significant intelligence to provide Indications & Warning and support to operations
 - More robust infrastructure required
 - Land domain awareness poor



Ongoing MDA Challenges (continued)

- Analyzing Information/Intelligence
 - Develop the “so what” on contacts, companies, people, etc to determine the threat/risk posed by vessels
 - Shift in mindset from regulatory concerns to national security
- Validating Information/Intelligence
 - Validation and verification of the RMP and vessel intentions
 - Lack of active sensors
 - Heavy reliance on others, as opposed to organic, surveillance assets

Extremist Activity

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- A map of the Arctic region, showing parts of Russia, Alaska, and the Northwest Territories. The map is overlaid with a grid of latitude and longitude lines. The text "RUSSIA" is visible in the upper left, "ALASKA" in the center, and "NORTHWEST TERRITORIES" in the lower right. The word "SIBERIA" is also visible in the upper left. The word "Arctic" is written in a large, stylized font across the center. The word "Operations" is written in a large, stylized font across the bottom. The word "Search and Rescue" is written in a large, stylized font across the bottom right. The word "Maritime Interdiction" is written in a large, stylized font across the bottom left. The word "Eco-tourism & Arctic Sightings" is written in a large, stylized font across the middle left. The word "Oil Industry Monitoring" is written in a large, stylized font across the middle right. The word "Whale, Seabird Protection" is written in a large, stylized font across the middle left. The word "Unauthorized Research" is written in a large, stylized font across the middle right. The word "Illegal Immigration" is written in a large, stylized font across the middle left. The word "Pollution" is written in a large, stylized font across the middle right. The word "Drug Smuggling" is written in a large, stylized font across the middle left. The word "Illegal Fishing" is written in a large, stylized font across the middle right. The word "Foreign Intelligence Collection" is written in a large, stylized font across the top left. The word "Operations" is written in a large, stylized font across the bottom left. The word "Search and Rescue" is written in a large, stylized font across the bottom right.
- Foreign Intelligence Collection
 - Illegal Fishing
 - Drug Smuggling
 - Pollution
 - Illegal Immigration
 - Unauthorized Research
 - Whale, Seabird Protection
 - Oil Industry Monitoring
 - Eco-tourism & Arctic Sightings
 - Maritime Interdiction
 - Search and Rescue

“Sum Up”

- The more we try to progress this, the more complicated it gets...harder to solve
- Solution rests in the intersection/union of Te, Th, & P...unfortunately I can't offer any more than that
- It's not about a specific target (set), it's about the process
- Questions to ask (answer):
 - What problem are we trying to solve?
 - What does the ops community want/need?
 - What can you realistically deliver?

Questions –
Panel Discussion?